No.



200000248

THEE UNITED STAYLES OF AVIERIOA

TO ALL TO WHOM THESE PRESENTS SHARL COME;

NDSH Research Joundation

ILCCCCO, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS TROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, ONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN SING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY IN THE UNITED STATES SEED OF THIS VARIETY (I) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASSICAL SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RILL. AND STATE 1542, AS AMENDED, 7 U.S.C. 2321 ET SEO.)

WHEAT, DURUM

'Lebsock'

In Testimony Therest, I have hereunto set my hand and caused the seal of the Hant Anciety Protection Office to be affixed at the City of Washington, D.C. this twelfth day of September, in the year two thousand one.

Atlesti

Parl M Zankunli

Commissioner Plant Variety Protection Office According to Modeline Science India nom Siona Vicultura

U.S. DEP	ARTMENT OF AGRICHI THE	F		-			Form Approved - OMB N	ia ar-
44-21-42-42	ARTMENT OF AGRICULTURI TURAL MARKETING SERVICI OGY - PLANT VARIETY PROT	TECTION OFFICE		The following st	late nents are made in accorda Reduction Act (PRA) of 1995.	nce with the i	Privacy Act of 1974 (5 U.S.C.	vod
APPLICATION FOR PLAN (Instructions and information)	T WADIETY DOOTES	OT: 0.1 0	IFICATE	Application is re (7 U.S.C. 2421).	quired in order to determine if a . Information is held confidentia	plant variet until certific	y protection certificate is to be a cate is issued (7 U.S.C. 2426).	ssued seeme
1 NAME OF OWNER				——————————————————————————————————————	2. TEMPORARY DESIGNA		T	
NDSU Research Founda	tion				EXPERIMENTAL NAME	TION OR	3. VARIETY NAME	
4 ADDRESS (Street and No., or R.F.D. I	to., City. State, and ZIP Code	and Country					Lebsock	
c/o Executive Direct	or	and Country)	٠		5. TELEPHONE (include as	rea code)	FOR OFFICIAL USE	1
P.O. Box 5014 Fargo, ND 58105-50	14				701-231-8931		PVPO NUMBER	,acr
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					6. FAX (include area code)	samely dis	1 0 0 0 2	4
					701-231-1013			<u> </u>
7 IF THE OWNER NAMED IS NOT A "PE	RSON" GIVE FORM OF	0.45.11				<u> </u>	FILING DATE	
otto-triest for (corporation, pariners)	Mp, association, etc.)	d. IF II STA	NCORPORATI NTE OF INCOR	ED, GIVE PORATION	9. DATE OF INCORPORAT	ION	mayera	
NDSU Research Foundat			h Dakota		May 1989	į	ויודץ יין, נעם	
10 NAME AND ADDRESS OF OWNER RE	PRESENTATIVE(S) TO SERV							
Elias Elias					cove all papers)		FILING AND EXAMINAT	ION
Department of Plant S	ciences		le Zetoc! ecutive l			1	[:7,450.00	
North Dakota State Un P.O. Box 5051	iversity	NDS	SU Resea:	rch Foundati	ion	- 4	€ 2450. =	
Fargo, ND 58105-505		P.(Far	D. Box 5()14 58105~5014		j	E DATE 5-17-20	∞
		- \ -	J- y - 10			ſ	C CERTIFICATION FEE:	
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	1					j	DATE \$/17/0	<u>ر</u> د
11 TELEPHONE (Include area code)	12. FAX (Include area code	(e)	13. E_MAI	ι		14. CROP	KIND (Common Name)	
701-231-8159	701-231-8474		elias@	prairie.nod	ak.edu	_	wheat:	
15 GENUS AND SPECIES NAME OF CROP			 	· · · · · · · · · · · · · · · · · · ·		Dui di	a HIGAL	
and a sound to the Chick		i	16. FAMIL	Y NAME (Botanical)	, `	17. IS THE	E VARIETY A FIRST GENERA	TION
<u>Triticum turgidum L. va</u>	ar. durum	j	Gramin	neae		_	YES MINO	
18 CHECK APPROPRIATE BOX FOR EACH	ATTACHMENT SUBMITTED	(Follow instructions	on	19 0055 7 55	A/CD COS 4	<u> </u>		
Exhibit A. Origin and Breeding				CERTIFIED SE	MER SPECIFY THAT SEED C ED7 See Section 83(a) of	F THIS VAR the Plant Var	HETY BE SOLD AS A CLASS Officery Protection Act))F
b. Exhibit B. Statement of Distinct			j	⊠ YE	S (If "yes", answeritems 20 nd 21 below)		NO (If "no," go to item 22)	ţ
c. 🔀 Exhibit C. Objective Description			–		······································			
d. Exhibit D. Additional Description	n of the Variety (Optional)		1	OF GENERATE	NER SPECIFY THAT SEED O ONS?	F THIS VAR	IETY BE LIMITED AS TO NUM	BER
Exhibit E. Statement of the Bas	is of the Owner's Ownership		1	☐ YES	S	Þ	№ 00	
 Voucher Sample (2,500 viable u verification that tissue culture wi repository) 	intreated seeds or, for tuber pri If be depositied and maintained	opagated varieties, d in an approved or		1 IF YES TO CO	Wan wereign a second			
9. 157 Filter and Francisco Con (ex	4501				EM 20, WHICH CLASSES OF F	-	_	
(Production Cince)				· · · · · · · · · · · · · · · · · · ·	cuen [CERTIFIED	
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?			D 2	3. IS THE VARIET	Y OR ANY COMPONENT OF THE	THE V/AC	V 8007E07E0 214	
•	_	w Asen IM LHE ()	. S. OR	PROPERTY RIC	HT (PLANT BREEDER'S RIGI	HT OR PATE	T PROTECTED BY INTELLEC	1 UAL
				☐ YES			NO ON I	
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)					GIVE COUNTRY, DATE OF F IMBER. (Please use space inc	ILING OR IS	SUANCE AND ASSIGNED	
24. The owners declare that a viable sample of for a luber propagated variety a tissue culture.	basic seed of the variety will be	e furnished with ap	elication and v				ations as a selection of the selection	
for a luber propagated variety a tissue cultu- The undersigned owner(s) is(are) the owner		repository and ma	intained for the	e duration of the ce	rtificate.	n such regula	mons as may be applicable, or	
The undersigned owner(s) is(are) the owner and is entitled to protection under the provision of that false recesses.	ions of Section 42 of the Plant	Variety Protection	Act.	= no poweve(s) that t	ne variety is new, distinct, unifo	orm, and stab	ole as required in Section 42,	
Owner(s) is(are) informed that false represe SIGNATURE OF OWNER	mation nerein can jeopardize p	protection and resu	it in penalties.					
· ^ ·			Si	GNATURE OF OW	NER			
Dale Zetoc	no							
NAME (Please print or type)			N	WE (Please print o	c brook			
Dale Zetocha				print G	· -/e/			
CAPACITY OR TITLE	T	. J.	,					
Executive Director	DATE	اراسا	´	PACITY OR TITLE			DATE	
	ction Office with tall 100	115 10	0					
&T-470 (6-98) designed by the Plant Variety Prote	Gion Office with WordPerfect (6.0a. Replaces ST	0-470 (03-96)	which is obsolete.	(See reverse for instruc	nons and inf	ormation collection burden stat	ement

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,45 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Varie Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

18a, Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Palent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131. 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions. reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of rises, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not a feed bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of universities at 12021-720-7205. To the appropriate lates of the programs of the program of the prog prohibited bases apply to all programs). Persons with disabilities who require alternative me Communications at (202) 720-2791. To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDO). USDA an event concentration and the secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDO). an equal opportunity employer.

S&T-470 (6-98) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (03-96) which is obsolete.

EXHIBIT A - ORIGIN AND BREEDING HISTORY

'Lebsock'

		HODBOOK
Fall 1986		Original cross was made at North Dakota State University (NDSU) greenhouse. Pedigree - Munich/D8469
		D8469 - D79220/D79122
		D79220 - Vic/D7025 D7025 - D6468//D61130/Leeds D6468 - Ld3574/St464/Ld357 D61130 - Lakota//Dwf/Langdon
		D79122 - Edmore/Wakooma
Spring 1987	7	F ₁ plants, NDSU greenhouse.
Summer 1987	7	F ₂ plants, NDSU research land.
Summer 1988	3	F ₃ head rows, NDSU research land.
Summer 1989)	F4 head rows, NDSU greenhouse.
Summer 1990)	F_5 head rows, NDSU research land.
Summer 1991		F ₆ preliminary yield trail, two locations, NDSU research land. Experimental line designation - D901313
Summer 1992	:	\mathbf{F}_7 Advanced yield trial, two locations, NDSU research land.
Summer 1993		F_8 Elite yield trial, three locations, NDSU research land.
Summer 1994		F, Uniform Regional Durum Nursery, 13 locations, North Dakota, South Dakota, Minnesota, Montana, and Canada.
Summer 1995		F ₁₀ Uniform Regional Durum Nursery, 13

locations, North Dakota, South Dakota,

Minnesota, Montana, and Canada.

Summer 1996	F_{11} Uniform Regional Durum Nursery, 13 locations, North Dakota, South Dakota, Minnesota, Montana, and Canada.
Summer 1996	Seed increase by Seedstocks Project.
Summer 1997	Uniform Regional Durum Nursery, 13 locations, North Dakota, South Dakota, Minnesota, Montana, and Canada.
Summer 1997	Second seed increase by Seedstocks Project.
Summer 1998	Uniform Regional Durum Nursery, 13 locations, North Dakota, South Dakota, Minnesota, Montana, and Canada.
Summer 1998	Third seed increase by Seedstocks Project.
July 1, 1999	D901442 was released as a named cultivar, Lebsock.

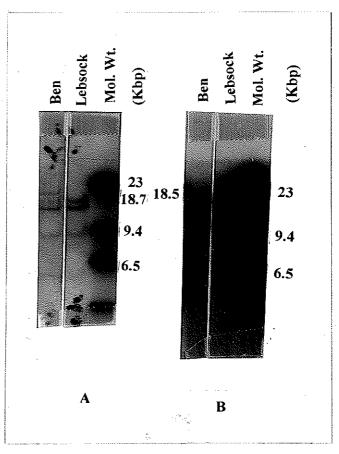
Lebsock was observed for nine generations from 1990 to 1998 and was shown to be stable and uniform. Lebsock has been rogued at the F_5 and subsequent generations. The frequency of rogued plants in each generation was less than 1/1000 plants. No variants were found in the variety Lebsock.

The pedigree breeding method was used to develop Lebsock. In early generations F_2 F_4 high heritable traits such as plant height, maturity, and disease resistance were selected. Starting at F_5 generation, selection criteria also included grain yield, test weight, kernel weight, and pasta quality traits (i.e., protein content, gluten strength, milling extraction, spaghetti color, cooking quality, etc.). Based on data from multiple locations and years Lebsock was selected for its high yield, test weight and protein content, large kernel size, and gluten strength.

EXHIBIT B - NOVELTY STATEMENT

To my knowledge, Lebsock most nearly resembles Ben durum wheat. Ben and Lebsock durum wheat can be unambiguously differentiated by molecular markers. Restriction fragment length polymorphism (RFLP) analysis using clones BCD1088 and CD01435 detected polymorphisms between Ben and Lebsock.

Figure 1. RFLP analysis of genomic DNA showing restriction fragment size polymorphism between Ben and Lebsock. Panel A Autoradiogram of Ben and Lebsock *XbaI-digested DNA hybridized with clone BCD1088. Polymorphism is shown by the presence of a 18.7 kilobasepairs DNA fragment in Ben and absent in Lebsock. Panel B Autoradiogram of Ben and Lebsock *XbaI-digested DNA hybridized with clone CD01435. Polymorphism is shown by the presence of a 18.5 kilobasepairs DNA fragment in Ben but absent in Lebsock.



Materials and Methods

Genomic DNA extraction, restriction endonuclease digestion, and Southern blotting were described in Riede and Anderson (1996). Both RFLP clones were obtained from Mark Sorrells at Cornell University (WG Clone). Both clones were known to hybrized to low-copy DNA sequences. The procedure was repeated twice to confirm results.

Riede, C.R., and J.A. Anderson. 1996. Linkage of RFLP markers to an aluminium tolerance gene in wheat. Crop Sci. 36:905-909.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE COMMODITIES SCIENTIFIC SUPPORT DIVISION DELYSVILLE, MARYLAND 2070S OBJECTIVE DESCRIPTION OF VARIETY

INSTRUCTIONS: See Reverse. WHEAT (TRITICUM SP)	P.)
NAME OF APPLICANTIS	FOR OFFICIAL USE ONLY
NDSU RESEARCH FOUNDATION ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	200000248
BOX 5014	VARIETY HAME OR TEMPORARY OSSIGNATION
FARGO, ND 58105-5014	LEBSOCK
Place the appropriate number that describes the varietal character of this varietal place a zero in first box (e.s. 0 8 9 or 0 9) when number is either 99 or	ety in the boxes below. or less or 9 or less.
I. KIND:	
1 TYPE	6 = POULARO 7 = CLUB
1 I = SPRING 2 = WINTER 3 = OTHER (Specify) 3 2 = H	ALIDED
3 1 = WHITE 2 = RED 3 = OTHER (Specify) AMBER	
3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:	
5 4 FIRST FLOWERING 5 8	LAST FLOWERING
4. MATURITY (50% Flowering):	
0 2 NO. OF DAYS EARLIER THAN	ARTHUR 2 = SCOUT 3 = CHRIS
NO. OF DAYS LATER THAN	EMHI S = HUGAINES 6 = LEEDS
5. PLANT HEIGHT (From soil level to top of head):	
8. 6 cm. High	
CM. TALLER THAN	
O CM. SHORTER THAN	RTHUR 2 = SCOUT 3 = CHRIS
PLANT COLOR AT BOOTING (See reverse): 7. ANTHER	
1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN 1 = YEL	
. STEM:	
Anthocyania: I = ABSENT 2 = PRESENT	com: 1 = ABSENT 2 = PRESENT
Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT	des: 1 = HOLLOW 2 = SOLID
	L INTERNODE LENGTH BETWEEN FLAG LEAF ND LEAF BELOW
AURICLES:	, , , , , , , , , , , , , , , , , , , ,
1 Authocyania: I = ABSENT 2 = PRESENT 1 Hairines	ss: [= ABSENT 2 = PRESENT
. LEAF:	
Flag leaf at 1 = ERECT 2 = RECURVED Dooring stage: 3 = OTHER (Specify): 1 Flag leaf	al: 1 = NOT TWISTED 2 = TWISTED
Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT 1 Vaxy blo	oom of flag leaf sheath: 1 = ABSENT 2 = PRESENT
0 MM. LEAF WIOTH (First feel below stag feet) 2 2 CM	I. LEAF LENGTH (First leaf below flag leaf):
RM LMGS 470-6 (6-82) (Farmerly, Farm LPGS 470-6 (3-79), which may be used)	

II. HEADI		
Deasny: 1 = LAN	3° DENSE	Shape: 1 = TAPERING 2 = STRAP 3 = CHAVATE
4 Awnedness: 1 = Awi	LESS 2 = APICALLY AWNLETED	J = AWHLETED 4 = AWHEO
2 Color at maturity: 5	WHITE 7 TYELLOW 3 PINK TOTAL T	4 = RED HER (Specily):
0 6 CM. LENGTH		1 0 MM. WIDTH
12. GLUMES AT MATURIT 3 Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.)	3 Width: 1 = NARROW (CA. J mm.) 7 = MEDIUM (CA. J.S mm.) 3 = WIDE (CA. 4 mm.)
6 Shoulder 1 = WANTII		E Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE
13. COLEOPTILE COLOR:		14. SEEDLING ANTHOCYANIN;
•	O 3 = PURPLE	1 1 = ABSENT _ 2 = PRESENT
15. JUYENILE PLANT GRO	WTH HABIT:	
3 1 = PROSTRATE	2 = SEMI-ERECT 3 = ER	
14 SEED:		<u> </u>
3 Shapet I = OVATE	2 = OVAL 3 = ELLIPTICAL	Cheek: 1 = ROUNDED 2 = ANGULAR
2 Brush. 1 = SHORT	2 = MEDIUM 3 = LONG	1
Phenol reaction	I = IVORY 2 = FAWN 3 = LT. BRO 4 = BROWN 5 = BLACK	Brush: I = NOT COLLARED 2 = GOLLARED
2 Color: I = WHITE	?=AMBER 3=REO 4=PURPLE	S = OTHER (Specify)
0 7 MM. LENGTH	0 3 MM. WIDTH	3 7 GM. PER 1000 SEEDS
17. SEED CREASE:		
2 Vidth:] = 602 OR LE	S OF KERNEL WINOKA	Depth: 1 = 20% OR LESS OF KERNEL SCOUT
2 = 802 OR LES	OF KERNEL 'CHRIS'	2 = 35% OR LESS OF KERNEL 'SCOUT'
	WIDE AS KERNEL "LENH!"	3 = 50% OR LESS OF KERNEL LEMHI
18. DISEASE: (0 = Not Tested	, 1 = Susceptible, 2 = Resistant)	
2 STEM RUST	2 LEAF RUST (Racce)	0 STRIPE RUST 0 LOOSE SMUT
0 POWDERY MILDEW	0 BUNT	OTHER (Specify)
19. INSECT: (0 = Not Tested,	1 = Susceptible, 2 = Resistant)	
0 SAWFLY	O APHID (Bydv.)	0 GREEN BUG 0 CEREAL LEAF BEETLE
() OTHER (Specify)	HESSIAN FLY	
•	RACES:	
		000 000 000
O. INDICATE WHICH VARIETY	MOST CLOSELY RESEMBLES THAT S	UBMITTED:
CHARACTER	NAME OF VARIETY	CHARACTER NAME OF VARIETY
Plant tillering		Seed size
Leaf size		Seed shape
Leaf color	50 (* 1) J.	Coleoptile elongation
Leaf carriage	• 10 22 2	Seedling pigmentation

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (a) L.W. Briggle and L. P. Reitz. 1963. Classification of Triticum Species and Theat Varieties Grown in the United States. Technical Bulletin 1278, United States Department of Agriculture.
- (b) W.E. Walls, 1963. A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity. Contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See altachment.)

Mean of quality traits of the durum cultivar Lebsock and selected durum cultivars grown in the drill strpis at various locations in North Dakota (1994-1998).

		Test	Żİ,	1000		Fall		Wheat	Semo	Total	Semo	Semo				Cook	
Variety	Standard	Weight	Kern	KWT	Lg		Sed	Prot	Prot	Ext	Ext	Ash	Specks	Mixo	Color		Firm
	6 % nq/ql	nq/q	%	ĝ	%	sec	шш	%	%	%	%	%	#/10 sq in			%	g cm
Lebsock		60.4	91	38.2		437	39	14.3	13.6	9.69	61.2	0.67	36	9	9.5	6.5	6.3
Maier		59.0	95	36.8	52	422	49	15.2	14.4	69.5	8.09	0.71	34	7	9.3	6.4	7.3
Mountrail	ഗ	58.8	91	37.7	49	416	41	14.3	13.7	68.9	60.5	0.68	35	ß	0.6	6.1	6.2
Ben	S	59.6	95	40.1	63	415	43	14.6	13.8	69.2	8.09	69.0	35	ဖ	9.0	6.7	6.5
Munich	ဟ	58.7	9	35.4	48	399	36	14.4	13.7	69.3	60.5	69.0	32	5	9.4	6.4	6.4
Medora	တ	58.9	95	36.4	53	425	43	14.9	14.0	68.8	60.2	0.70	35	ဖ	9.3	6.4	6.5
Monroe	တ	58.4	92	40.6	63	396	40	14.5	13.6	69.3	60.7	0.70	38	9	9.0	6.4	6.5
Renville	ဟ	29.0	95	36.1	43	411	39	14.6	13.7	6.69	61.5	0.68	33	9	9.1	6.5	6.5
Vic	တ	59.1	93	39.4	28	400	39	14.7	13.9	69.1	60.4	0.68	35	9	9.3	6.5	6.7
Lloyd	တ်	56.6	87	37.3	47	400	44	14.1	13.2	68.5	59.7	0.73	36	9	8.9	8.9	6.5
Rugby		59.1	9	36.2	20	392	24	14.5	13.6	0.69	8.09	0.71	36	က	9.1	6.5	5.4
Belzer		97.2	95	38.7	09	425	53	14.3	13.6	9.89	60.1	0.68	35	7	9.5	9.9	6.5
Avg. of Standards	w	58.7	6	37.8	53	409	42	14.6	13.8	69.2	9.09	0.70	35	9	9.1	6.5	9.9

Number of locations/years = 30

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STATEMENT OF THE BASIS OF OWNERSHIP 1. NAME OF APPLICANTIS/	certificate is to be issued (7 U.S.C. 2421). Information is held confituration as instance of the confituration of the confituration of the confituration is seen to the confituration of the confitur
NDSU Research Foundation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER D901442 Lebsock
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	
6/o Executive Director P.O. Box 5014 Fargo, ND 58105-5014	5. TELEPHONE (include area code) 701-231-8931 6. FAX (include area code) 701-231-1013
	7. PVPO NUMBER 200000248
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate is	block. If no, please explain. X YES NO
9. Is the applicant <i>lindividual or companyl</i> a U.S. national or U.S. based company if no, give name of country	8
10. Is the applicant the original owner?	X YES NO
a. If original rights to variety were owned by individual(s), is (are) the X YES NO If no, give name of country b. If original rights to variety were owned by a company, is the original YES NO If no, give name of country	inal owner(s) a U.S. based company?
11. Additional explanation on ownership (If needed, use reverse for extra space):	
See additional Exhibit E Statement of the Basis of the Applicant	t's Ownership included in the application.
EASE NOTE:	
ant variety protection can be afforded only to owners (not licensees) who meet one	
	s of the following criteria:
If the rights to the variety are owned by the	e a U.S. national, national of a UPOV member country, or national genus and species.
of a country which affords similar protection to nationals of the U.S. for the same If the rights to the variety are owned by the arrival and the U.S. for the same	- Solida dilid abeciles.
If the rights to the variety are owned by the	al breeder(s), the company must be U.S. based, owned by affords similar protection to nationals of the U.S. for the same

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Dr. Elias M. Elias, an employee of the North Dakota Agricultural Experiment Station and North Dakota State University, is a plant breeder who developed 'Lebsock' the durum wheat cultivar for which Plant Variety Protection is hereby sought. The employee by agreement and because of the condition of the use of facilities and funds of the North Dakota Agricultural Experiment Station and North Dakota State University has assigned all ownership rights to 'Lebsock' durum wheat to the North Dakota Agricultural Experiment Station and North Dakota State University.

North Dakota State University on behalf of the North Dakota Agricultural Experiment Station has assigned all ownership to the NDSU Research Foundation. The NDSU Research Foundation is a nonprofit corporation set up to own and manage the intellectual property of North Dakota State University.